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## PHOTOGRAPHY, TONE & COLOR CORRECTION

655.302 : 655.306

HOW TO TEST THE EFFECT OF PAPER COLOR ON PROCESS COLOR REPRODUCTIONS. Frank Preucil. LTF Research Progress, No. 51, January 1961. The ideal paper for process color is smooth, bright and a "neutral white". Cream colored papers have an excess of yellow and red, fluorescent whites are inclined to be bluish. A number of cases of trouble due to paper color are cited, one involving 8 carloads of printing. The whiteness of paper can be measured by means of a densitometer using magnesium carbonate as a standard. A method of studying the effect of paper color on the printed result is given. This involves the use of spinning segments of the three process colors and black together with discs of the paper under consideration. Methods are given for converting the observed results in terms of additional color which may be needed to correct the printed result. 6 illustrations.

655.302

COLOR MATCHING AND COLOR PIGMENTS. Richard Adam. Modern Irish Printer 2, No. 4 Spring Edition, 1961, pp. 9-12 (4 pages). Author describes several situations in which the printer might be called upon to do his own color matching. Attempting to match a color by name is warned against. Pitfalls can be due to color of printing paper, texture of original being matched or color of viewing light. Variations in the human eye are another factor. Some specific suggestions are: (a) Match with as few inks as possible; (b) Add toners cautiously; (c) Darken with complementaries rather than black; (d) Some colors cannot be matched with full brightners; (e) Accurate weighing in matching stage to assure proper bulk batch mixing. Properties of pigments used must be taken into account.

655.302

FUTURE OF SCANNING LOOKS BRIGHT. Martin Grayson. Modern Lithography 29, No. 5, May 1961, pp. 76, 81, 126-127 (4 pages). Author compares proposed series of debates on "The Scanner vs Masking" with debates 50 years ago on "The Automobile vs the Horse". Large companies with research resources, many of them new to the graphic arts, entering that field speak well for the future. New developments in various phases of printing are described. The operation of the P.D.I. (Time-Life) Color Scanner is described briefly.

655.307

A NEW PUNCH REGISTER SYSTEM. Arnold Rogers. Graphic Technology 1, No. 1, May-June 1961, p. 45 (1 page). Description of a system developed by Rogers Engraving Company which uses 3 slotted punched holes on 3 sides of a film to insure that register in the center of a film will always be the same. Variation in film size during processing measures from the center out rather from one side, thus reducing by half the misregister due to such change during processing. 4 illustrations.

655.302

*U.S. Patent 2,987,571. Filed March 3, 1958, Ser. No. 718,748. Gorden S. J. Allen and David H. Mawby, assignors to J. F. Crosfield Ltd., London, England, a company of Great Britain. COLOR PRINTING. Official Gazette, Vol. 767, No. 1, June 6, 1961, page 228. 1. Color reproduction apparatus comprising an electro-optical scanner, a correction path including a circuit in which at least one electric signal from said scanner representing a correcting color is subtracted from an electric signal representing a color to be corrected, a non-linear circuit for receiving the output signal from said subtraction circuit and having an input-output characteristic in which the gain is reduced as the input increases thereby providing an uncompensated non-linearity in said correction path, and a light source the brightness of which varies with the output of said non-linear circuit and which is arranged to expose a photographic emulsion which will provide the printer for the given color.

771.317

*DUAL-DRIVE FOCUSING SYSTEM FOR CAMERAS. U. S. Patent 2,989,893. Filed June 2, 1958, Ser. No. 739,279. Walter Wanielista and Leonard Florsheim, Jr., assignors to Robertson Photo-Mechanix, Inc., Chicago, Ill., a corporation of Illinois. Offical Gazette, Vol. 767, No. 4, June 27, 1961, page 917. 1. In a dual drivefocusing system for cameras or the like, an electrical circuit, a screw operated by said circuit, a carrier focusing means carrying a lens or a copy board or the like, track means supporting said carrier means, manually operable means carried by said carrier means for selective engagement with said screw for adjustment of said carrier means, manually operable plunger means, means carried by said screw adapted to removably receive said plunger means to selectively lock said screw, and microswitch means actuated by said plunger means for opening the circuit for said screw when said plunger means is engaged in locking relationship to said screw and for closing circuit means for said screw when said plunger means is in disengaged relationship to said screw.

771.42

*PHOTOGRAPHIC METHOD. U. S. Patent 2,989,909. Filed June 17, 1957, Ser. No. 666,125. Stanley F. Reed, assignor to Logetronics, Inc., Alexandria, Va., a corporation of Delaware. Official Gazette, Vol. 767, No. 4, June 27, 1961, page 922. A photographic method comprising energizing a light source to produce a variable light beam of constant color, directing said beam to illuminate an elemental area of a subject, scanning said subject with said beam and directing a portion of said light from each elemental area of said subject to form a real image on a photosensitive surface to expose the same, directing a portion of said light from each elemental area of said subject to a light intensity device, and continuously modifying the product of said intensity and exposure time of said light beam as a positive function of and simultaneously with changing values of the sensed intensity to produce exaggerated exposure differences between elemental areas of the photosensitive surface, wherein the speed of the scanning beam is modified as a function of the sensed intensity.

655.302

SOME THOUGHTS ON FLASHING. W. B. Hislop. Process 67, No. 803, December 1960. pp. 398-399 (2 pages). Discussion explains flashing in the camera when using the glass cross-line screen and gives some of the history and theory back of it. "The best flash dot is produced with a very small stop, a strong light, and the screen at the distance at which diffraction gives the smallest dot". This is developed into ideas for using a small light source in a fixed position with a 45° mirror to direct the light where needed.

655.302

HOW TO USE A COLOR CHART. Anon. The Graphic Arts Buyer of Chicagoland 2, No. 5, Mid/Year 1961, p. 45. A color chart represents actual samples of combinations of colors and tints from which a selection may be made. Standardization of a number of variables is necessary to obtain consistent results. The effect of surrounding color is pointed out.

655.08

COLOUR MEASURING METHODS. K. E. Woods. The British Ink Maker 3, No. 3, May 1961, pp. 26-31, 33 (7 pages). Visual judgment of color is subject to variation in individuals and in viewing light. Color samples for comparison can change. Both visual and photo-electric means of measuring color are used. Visual means are only as accurate as the eyes of the operator. Prism and filter spectrophotometers are described. The C.I.E. Chromaticity Diagram is shown with British Standard 3020 colors plotted. There are deficiencies in the C.I.E. method. One effort to overcome one of these deficiencies is the Hunter Uniform Chromaticity Scale, which is explained and illustrated. 6 diagrams.

771.447

SHEDDING LIGHT ON THE CAMERA COPYBOARD. Roland Beattie, II. Printing Production 91, No. 8, May 1961, pp. 52-53, 97-98 (4 pages). Author first shows the need for greater illumination around the edges of a camera copyboard than in the middle. With even illumination on copy, light fall off toward edges of negative. An illumination system giving even negative illumination at various reduction ratios is described. 5 illustrations.

655.302

*COLOUR OR TONAL REPRODUCTION. U. S. Patent 2,993,954. Filed September 29, 1958, Ser. No. 764,094. Gordon S. J. Allen and David H. Mawby, assignors to J. F. Crosfield Ltd., London, England, a British company. Official Gazette, Vol 768, No. 4, July 25, 1961 page 975. 1. Apparatus for reproducing visual images, comprising a plurality of transparencies, a light source for each transparency, means for effecting simultaneous synchronous relative movement between said light sources and transparencies for scanning said transparencies element by element, light-sensitive devices behind said transparencies which convert the light passing through the transparencies into electric signals of corresponding magnitude, means including an electrical computer for generating from said signals the electric correction signal required for the scanned element of at least one of said transparencies, means driven by said correction signal for modulating the brightness of the corresponding light source, and an unexposed light-transmitting photographic layer placed immediately behind and substantially in contact with said transparency for which the correction has been computed, whereby light which passes through said transparency to the associated light-sensitive device also passes through said photographic layer and exposes it in accordance with corrected light values.

655.302

*METHOD OF AND APPARATUS FOR ELECTRONIC COLOR CORRECTION. U. S. Patent 2,993,087. Filed February 11, 1959, Ser. No. 792,666. Rudolf Hell, assignor to Dr.-Ing. Rudolf Hell Kommanditgesellschaft, Kiel-Dietrichsdorf, Germany, a German company. Official Gazette, Vol. 768, No. 3, July 18, 1961, page 726. 4. In the art of reproducing color copics, wherein a color copy or three color extractions photographically obtained therefrom are scanned pointwise in consecutive lines, apparatus for effecting color correction by substituting a sufficiently great number of different discrete values for each of the three variable color measurement values x, y, z of the color picture points of the copy to be reproduced, said color measurement values x, y, z constituting a trio of values respectively characterizing a pigment color as to shade and color saturation, likewise substituting a sufficiently great number of discrete values for each of the three steadily variable color dosings u, v, w for the color picture points of the reproduction, said color dosings u, v, w constituting a trio of the respective relative depths of cups of three color separation prints, said color dosings functionally relating to the color measurement values x, y, z by three functions u=b(x,y,z), v=r(x,y,x), w=g(x,y,x), wherein the functions b, r and g correspond to predetermined reproduction factors, and by storing the trios of discrete color dosings, and releasing them by offering to them the associated trios of discrete color measurement values; said apparatus comprising means forming for each color measurement value x, y, z an electronic channel, means for conducting to the input of each channel, at a speed corresponding to the speed of scanning, the corresponding color measurement value which is variable as to time and which is represented by proportional electric signals, each channel comprising a switch for brief periodic reading of the signals, a quantisizing device for converting the discrete signal values ascertained in the reading into a finite number of signal quanta, and a converter for indicating the individual quantum numbers, said converter having a number of outputs corresponding to the number of quantisizing stages, a voltage alteration appearing in each reading period only at the output to which is allotted the signal quantum which is present in the reading.

## PLANOGRAPHIC PRINTING PROCESSES

655.326

HERE'S HOW PLATE SCUMMING PROBLEMS MIGHT BE SOLVED. Charles W. Latham. Printing Production 91, No. 8, May 1961, p. 47. Various forms of scumming are described and their causes given. Cures are given.

655.324 : 655.325

CRONAFLEX AND ITS USE AS AN OFFSET PRINTING PLATE. Anon. The American Pressman 71, No. 5, May 1961, pp. 45-46 (2 pages). Cronaflex is a polyester engineering reproduction and drafting film. A technique has been developed for converting this film into an offset plate that can be run on standard offset presses. Enlargements or reductions are possible. The use of the film by-passes several steps of the normal procedure. Runs are over 5,000 and to as high as 100,000 copies. Procedure in platemaking is described in detail. 5 illustrations.

655.325 : 655.322

THE EFFECT OF PLATE MAKING CONDITIONS ON THE TONE RENDERING OBTAINED USING NON-DICHROMATE SENSITIZED LITHOGRAPHIC PLATES. S. D. Winn and L. E. Lawson. The Journal of Photographic Science 9, No. 3, May/June 1961, pp. 180-187 (8 pages). Experiments designed to determine the effect of some of the variables encountered in plate making on the tone reproduction obtained from three different types of non-dichromate sensitized lithographic plates are described. Two of the plates studied were pre-sensitized. Of these one was negative and one was positive working. The other was a plate of the "wipe-on" type. 1 reference, 13 tables.

655.325

TYPEWRITER TIPS. Anon. The In-Plant Offset Printer 1, No. 3, May-June 1961, p. 9. Suggestions on direct typing of offset plates. Best typewriter - Electric. Best ribbon - A total transfer, one time ribbon. When typing for reproduction, type on coated stock rather than bond.

655.326

OVER EMULSIFICATION LEADS TO OFFSET PLATE PROBLEMS. Anon. Printing Production 91, No. 8, May 1961. p. 63. Emulsification means that ink has taken up some of the fountain solution. A small amount helps. Various troubles with too much are described. The condition of the plate is of prime importance in preventing excessive emulsification.

## PAPER AND INK

655.306

GLOSS INKS. E. A. Apps. The Litho-Printer 4, No. 5, May 1961. pp. 277, 279, 281, 283 (4 pages). The fundamental requirements of gloss inks are for most of the vehicle to remain on the surface of the stock and for the pigment particles to be completely covered and securely bound with a thin level film of the dried vehicle. The requirements of pigments and vehicles to give gloss are discussed. Synthetic resins give better gloss than linseed oil, for instance. Other requirements such as drying; emulsification in litho; paper stock such as coated, cast coated or cartonboard are also gone into.

655.326 : 655.329

PAPER TESTING TECHNIQUES AT WEB-OFFSET LABORATORY. Anon. The Graphic Arts Monthly 33, No. 5, May 1961, pp. 154, 156 (2 pages). Brief description of some of the paper tests run by Rochester Institute of Technology on their web offset press.

655.306

PAPER-INK-PRINTING PIP. Dr. R. F. Bowles. Graphic Technology 1, No. 1, May-June, 1961, pp. 39-43 (5 pages). There are now about 20 research institutions of various kinds engaged in work on printability. Experimental work has led to some definite conclusions. Smoothness of the paper is an important factor. Factors governing percentage of ink transferred to paper can be studied by weighing of printing surface before and after ink transfer and some graphs and data are given. Tack and viscosity are measured by the Inkometer and other instruments. A paper surface absorption test and the IGT Printability Tester are described. 7 Graphs or illustrations.

655.306

AVOID ERRORS WHEN BUYING PAPER. Charles V. Morris. National Lithographer 68, No. 5 May 1961, pp. 36-37, 50 (3 pages). Points are given on more explicit order writing to avoid costly mistakes. Some unfortunate case histories show some errors that could have been avoided, as: C1S paper delivered wrong side up, wrong skids, truck too large for dock, splices that would not stand oven temperature, skid loads beyond limitations of elevators, bowed edge cutting, etc. Illustration and two suggested order forms (roll and sheet).

655.306

WHY AND HOW PRINTING INK CAN BE A MANAGEMENT PROBLEM. Weldon R. Coate. The Inland and American Printer and Lithographer 147, No. 2. May 1961, pp. 58-60, 96 (4 pages). Full knowledge of requirements are needed to order ink. Increased use of long color runs, special print jobs, and possibility that wrong choice of ink can cause expensive trouble make ink choice important. Examples are cited to support these points. 5 illustrations.

667.5

FLUORESCENT PRINTING INKS. William R. Duncan. American Ink Maker 39, No. 5. May 1961, pp. 46-47, 49 (3 pages). Improvements in fluorescent pigments give greater lightfastness. Other pigment properties are discussed in relation to their use in inks for the various processes, vehicles and solvents. In use, mixing with other inks on rollers, on printed sheets, etc. is to be avoided. Other suggestions on use are given. 5 illustrations.

655.82

MAGNETISM, MAGNETIC RECORDING AND MAGNETIC INKS. C. H. Love. American Ink Maker 39. No. 5, May 1961, pp. 50-52, 55-57 (6 pages). Author first gives a review of the theory and history of knowledge of magnetism, magnets and magnetic materials, magnetic recording, the magnetic iron oxides and their use in magnetic inks. Tables give the specifications for magnetic inks as laid down by the American Bankers Association. 9 references - 2 illustrations - 5 tables.

655.326 : 655.329

THE PAPER MERCHANT AND THE WEB-FED PRESS TREND. Hugh N. Phillips. Paper and Paper Products 106, No. 2, January 1961, pp. 8-9, 25 (3 pages). The growth of roll fed offset printing is causing changes in many areas in the graphic arts, including paper and paper merchants. Problems of estimating, stock availability, pricing, inventories, information needed, etc. are discussed. 2 illustrations.

676.2

TECHNICAL ASPECTS OF THE ELDEMA ELECTRONIC DETECTION MACHINE. Claude J. Rinfret. Pulp and Paper Magazine of Canada, Convention Issue, 1961, pp. T123,24,25,26,27, 28 (6 pp.) This equipment is for sorting out defective sheets on the rotary cutter or sheeter. A flow diagram shows how paper is sorted into two piles; good paper and rejects. The operation of the equipment is explained in great detail. 8 illustrations.

655.326 : 655.307

BRONZE INKS AND POWDERS. Anon. Roland News 15, Summer 1960, Received March 6, 1961, pp. 29-30 (2 pages). Comparison of using bronze inks vs dusting on bronze powder. The powdering method gives better results because of lack of coverage by ink varnish, also uneven particle size of dusted on bronze gives better reflection. To avoid oxidation of bronze powder, keep pH of dampening solution near neutral.

655.306

THE EFFECT OF BINDERS ON PAPER GLOSS. Robert E. Weber. The Litho-Printer 4, No. 5, May 1961, pp. 295-296 (2 pages). This report is a study of the inter-relationships of paper gloss, printed gloss, and oil absorption as it pertains to the adhesive concentration in paper coatings. The various adhesives studied along with a clay pigment are: hydroxy-ethylated acid modified cornstarch, corn white dextrin, and soy protein. These coatings were applied by a KCM roll coater. The results show that printed gloss and oil holdout are improved with increased adhesive concentrations. Maximum printed glosses and oil holdout were reached at 36, 36, and 45 per cent adhesive concentration, respectively (based on a weight ratio of adhesive to 100 parts of pigment) for the hydroexyethylated starch, soy protein, and white dextrin. At higher adhesive concentrations there were no changes in the above properties. The calendered paper glosses were found to decrease at increased adhesive concentrations. Minimum paper glosses were found to exist at the binder levels where the maximum levels of printed gloss were obtained. At higher adhesive concentrations, the calendered paper glosses were found to increase. The above findings are explained in terms of the void volume concept for pigments and by the varying degress of adhesive bonding. 3 graphs.

655.306

HOW TEMPERATURE AND MOISTURE CAN CAUSE PAPER PROBLEMS. John L. Kronenberg. The Inland and American Printer and Lithographer 147, No. 2, May 1961, pp. 55-57 (3 pages) Suggestions are given on how to alleviate troubles. First some of the obligations and problems of the paper maker are described. Lithographers' obligations to his paper include proper ordering, proper conditioning to pressroom temperature and the sword hygrometer is mentioned. The problems of off-balance paper and air are explained at length and illustrated. 3 illustrations and 3 tables, one of them the LTF chart of temperature conditioning times.

## LITHOGRAPHY - GENERAL

655.319

OUR TRANSITION TO WEB ROTARY LETTERPRESS. James E. Ward. Share your Knowledge Review 42, No. 6, March 1961, pp. 18-21 (4 pages). Story of growth of web letterpress business in Baird-Ward Printing Company of Nashville, Tenn. First step was in telephone book work, later in the printing of periodicals. At one point offset was considered and rejected as letterpress was considered capable of doing all that was needed if plate and make-ready troubles were solved.

655.329

WHAT'S SO EXCITING ABOUT WEB OFFSET? Hyman Safran. New England Printer & Lithographer 24, No. 5, May 1961, pp. 60-61 (2 pages). Author explains his enthusiasm for web offset and compares it to jet airplane travel. Some of his own experience in the field is given, presses are discussed and growth set forth in a table of 6 pertinent points. Four of the problems of web offset are: 1. Few skilled craftsmen; 2. High speed equipment scarce; 3. Paper and ink problems; 4. Resistance to change in the industry.

655.28 : 655.329 : 655.7

NAIROBI NEWSPAPER SERIES SHOWS THE WAY WITH WEB-FED OFFSET-LITHO AND FILM-SETTING. Anon. British Printer 74, No. 5, May 1961, pp. 106-111 (6 pages). Newspapers have not always welcomed technological progress. A series of newspapers in West Africa has pioneered. The press is a 2 unit blanket-to-blanket Crabtree operating at 2800 iph. The eight newspapers approximate 340 tabloid pages a week. A combination of hot metal and filmsetting is used with paste-up page makeup. Procedures and sources of supplies are given briefly. 7 illustrations.

655.329

A DAILY SWITCHES TO WEB-OFFSET AND EXPERIENCES A NEW ERA OF SUCCESS. Doyle Shirley. The Graphic Arts Monthly 33, No. 5, May 1961, pp. 66, 68, 70, 72, 74, 76 (6 pages) A story on the West Point (Ga.) Valley Times News four months after the switch. Circulation is about 5500. Anticipated advantage of reduced operating costs was realized; also new business was added. Two contracts to print other papers came unsolicited. Improved quality of reproduction has increased circulation. Press is a Goss Suburban. Production methods and plant are described. 2 illustrations.

655.329

HOW TO USE WEB OFFSET. Herbert E. Phillips and James W. Marshall. Printing Production 91, No. 8, May 1961, pp. 64-65, 68, 70 (4 pages). Web offset's good and bad sides are revealed by users of the process. Some of the points discussed in the annual PIA Web Offset meeting were: types of printing for which it is best adapted, paper handling, moisture content of paper through oven, and LTF's training and survey programs.

655.7 : 655.32

APPRAISES OFFSET PROCESS FOR PRINTING NEWSPAPERS. William D. Rinehart. Printing Production 91, No. 8, May 1961, pp. 55, 70 (2 pages). Some 500 weekly newspapers are now being printed by offset. Cold type composition and pasteup give economies. The move to offset in daily newspapers is less rapid with about 40 papers so printed. Most of these use cold type. Comparisons of costs between offset and letterpress are given.

655.329 : 655.07

LTF EXPLAINS RESEARCH PROGRAM AT CHICAGO WEB-OFFSET MEETING. H. H. Slawson. Modern Lithography 29, No. 5, May 1961, pp. 45, 47, 125-126 (4 pages). Report on talks by Borchers on research project and Shapiro on training program for web offset. Several representatives of plants operating web offset presses reported on their problems.

655.326

ACID AND ALKALINE SOLUTIONS - FRIEND OR FOE? John J. Jayne. National Lithographer 68, No. 5, May 1961, pp. 38-39, 52, 66, 88 (5 pages). An explanation of the pH scale and its significance in lithography is given. The pH of the fountain solution can vary during a run and must be maintained at the right value. The pH of paper can influence the drying of ink.

655.326

NEW TRENDS CAUSE PROBLEMS. William E. Yochheim. National Lithographer 68. No. 5, May 1961, pp. 44-45, 88 (3 pages). Press troubles with paper appear to increase in spite of improved paper. This is attributed to certain trends, such as larger presses; smoother plates; less water and different dampeners; inks with faster, harder drying, less penetration; paper with improved opacity, better gloss, more water resistance. The negative effects of some of these apparently positive moves are discussed; More moisture reduced static, reduced adhesion to blanket; larger presses give higher paper speeds, causi increased ink tack leading to gripper trouble; etc. 2 illustrations.

655.03 : 655.32

LITHO LINGO. Anon. The Graphic Arts Buyer of Chicagoland 2, No. 5, Mid/Year 1961, pp. 25, 27, 35, 42 (4 pages). Here are the meanings of 127 commonly used terms used in connection with the production of lithography.

655.328

ALL ABOUT BLANKETS. Anon. In-Plant Offset Printer 1, No. 3, May-June 1961, pp. 15, 17 (2 pages). What every pressman should know about one of the key pieces of lithographic gear. Qualifications of a good blanket, installation and cleaning are discussed.

## GRAPHIC ARTS - GENERAL

655.08

THE LTF STAR TARGET FOR INK SPREAD AND RESOLUTION MEASUREMENTS. George W. Jorgensen. LTF Research Progress No. 52, February 1961. Use of a similar target by a printing plant pointed out the value of such a control means. A similar target used in optical work incorporated improvements and was adopted as the original from which duplicates would be made. Printed onto the corners of the trailing edge of the sheet, the star target image can show by the diameter of the center area the amount of ink spread, and by its shape can show the presence of slur or doubles. Used in the plateroom it can be used to check contact in the printing frame or use of excess lacquer. In the camera room it can be used to check the resolution capabilities of lens and film. Techniques for all of these are explained. 8 illustrations.

655.312

NEW RCA PROCESS FOR PRODUCING NEWSPAPER ENGRAVING PLATES SAVES COST, TIME OVER CONVENTIONAL METHODS. Anon. The Photoengravers Bulletin 50, No. 10, May 1961, pp. 21-25 (5 pages). Description of the application of the Electrofax electrophotographic technique to photoengraving. A precoated plate is exposed in the camera, the electro-static image is toned, fused, the coating washed out and the plate etched. The technique is said to be applicable to lithography. 4 illustrations.

655.02

IS YOUR PLANT LAYOUT A HELP OR A HINDRANCE? Charles W. Latham. The Inland and American Printer and Lithographer 147, No. 2, May 1961, pp. 68-69, 137 (3 pages). The relationship between equipment and its output to space and placement in a plant are explored in relation to the type of operations. Since every layout is a compromise, only general rules are given. Methods of planning a layout with the aid of templates for every item of equipment are discussed. 1 sample layout.

655.255

AUTOMATION IN THE READING DEPARTMENT. H. Tolson. Printing World 168, No. 18, May 3, 1961, p. 476 (1 page). Recently there have been passing references to the use of tape recorders in proof reading. Basically the routine is to read the copy onto the tape and later, when the proofs are ready, to play back the copy so that the reader checks the proof against the electrical reproduction instead of the copyholder's voice. The method is capable of considerable development which could well bring higher efficiency to the work of the reading department.

655.307

STATIC ELIMINATOR FOR A BUCK. Anon. The Publishers' Auxiliary 96, No. 16, April 22, 1961, p. 1. Describes a simple static eliminating gadget consisting of conducting wire and chains for use on a newspaper press. 1 illustration.

655.28

THE LINOFILM SYSTEM. George L. Wakefield. Graphic Technology 1, No. 1, May-June, 1961, pp. 16-21 (6 pages). This system is no adaptation of hot metal typesetting, but a completely new electronic approach which has undergone 10 years of research and field testing. It involves 5 units: keyboard, photographic, corrector, composer and tape splicer. The keyboard punches a tape and makes a typewritten record. Correction in film is by cutting out defective lines and butt welding in corrected lines, automatically. Other operations are explained in some detail with the aid of 16 well captioned illustrations.

655.31

A BELIEF THAT LETTERPRESS HAS ADVANCED QUICKER THAN LITHO IN PAST TEN YEARS. Philip J. Wright. Printing World 168, No. 10, March 8, 1961, pp. 252-253, 274 (3 pages) Ten years ago there was a feeling that letterpress was through, the future lay in lithography. That thinking is revised due to six reasons: (1) Photocomposing growth has been disappointingly slow; (2) Letterpress equipment has improved; (3) Improvements in inks and paper; (4) Litho progress has slowed down; (5) New types of relief printing plates; (6) New sheet fed rotary letterpress presses. These points are elaborated upon.

655.322

ELECTRONIC ENGRAVING FOR PHOTOGRAVURE CYLINDERS. H. M. Cartwright. Graphic Technology 1, No. 1, May-June 1961, pp. 28-32 (5 pages). Electronic engraving of photogravure cylinders would seem to be a natural sequel to successful developments in relief engraving. It is not so easy, however, to apply principles established for flat halftone surfaces to intaglio cylinders. Development is going on. Machines developed by Southey for wallpaper printing, the Rotatron being developed by Staub, and Dr. Hell's Roto-Klischograph are discussed briefly. 4 illustrations.

655.06

FACTS ABOUT TAGA. Anon. Share Your Knowledge Review 42. No. 6, March 1961, p. 4 (1 page). The Technical Association of the Graphic Arts was organized in 1948, had its first meeting in 1949. Its aims are to stimulate research; to improve the qualifications of technicians through high standards of professional ethics, education, and attainment; to increase and diffuse knowledge; and to promote scientific interests through meetings, discussions, and publications.

655.02

FULLY INTEGRATED BLANCHARD PLANT. Ernest F. Trotter. Printing Magazine 85, No. 5, May 1961, pp. 62-64, 80-81 (5 pages). Description of a "dream-plant-come-true," a one-floor web and sheet fed periodical plant printing in the New York City area. Over 30 weekly and monthly publications are printed and handled through the built-in Post Office sub-station. Presses include verticals, cylinders and sheet and web fed rotaries. Floor layouts with all equipment identified cover pressroom and bindery. Spaciousness is emphasized. An interesting feature is the sheeting of paper off the roll in the pressroom. 8 illustrations and 2 layouts.

655.2

EYEBALL TEST SELECTS READABLE TYPE. Anon. The Publishers' Auxiliary 96. No. 21, May 27, 1961, p. 1 (1 page). Story of methods used by an assistant professor of psychology in comparing several type faces, sizes and leading. The machine is an Opthalmograph. Its use is described. The type chosen was 8 pt. Imperial on a 9 pt. slug. 1 illustration.

655.315

THE DAXENE PLATE . . . IT'S ROLE IN AN EXPANDING LETTERPRESS INDUSTRY. Norman G. Tompkins. New England Printer & Lithographer 24, No. 5, May 1961, pp. 56-57 (2 pages) Story on the development of a plastic letterpress duplicate plate made from a newly discovered plastic. Cost is comparable to rubber, much less than an electrotype, fine detail rendered better than rubber, run lengths are in the 300,000 to 500,000 area. Plate is flexible, can be used "wrap-around". Making of a plate is shown in 8 illustrations.

See also - The Electrotypers & Stereotypers Magazine 47, No. 6, June 1961, pp. 18, 20, 22 (3 pages).

655.28

PHOTOCOMPOSITION AT THE MILWAUKEE JOURNAL. Anon. The Graphic Arts Monthly 33, No. 5, May 1961, pp. 14-16, 150 (4 pages). Started in 1955, in 1960 more than 7,000,000 lines of display advertising produced. Two Fotosetters and a Filmotype are used. Other facilities are listed and procedures described. Plates are rapid etched in magnesium. Advantages are in sharpness and clarity, advantages of pasteup in production, and in levelling out the work in the engraving department. 3 illustrations.

655.315

POLYPROPYLENE - A NEW PLATE MATERIAL. C. C. Gosselin. Print in Britain 9, No. 1 May 1961, p. 29 (1 page). Description of the properties and use of this plastic molding material suitable for the making of duplicate plates. It is transparent, light, flexible enough to be used on rotary presses and unaffected by printing inks and normal cleaning solvents. Runs of over 100,000 are possible. One illustration run from a polypropylene plate.

655.318

SOME OBSERVATIONS ON THE WRAP-AROUND PRESS AFTER THREE MONTHS OPERATION. William Bradley. The American Pressman 71, No. 5, May 1961, pp. 33-34 (2 pages). Report is on a Harris 23 x 30 used in label printing. The press is described. A wide variety of inks were successful. Plates were powderless etched zinc made from negatives prepared for offset printing. Plates .025 in. thick etched to depths of .006 to .007 in. worked best. Chief difficulty so far has been in the plates. 1 illustration.

655.2

ELECTRONIC READING MACHINE - A PROGRESS REPORT. Clyde C. Heasly, Jr. Printing Production 91, No. 8, May 1961, pp. 44-46, 96 (4 pages). Optical scanners are in use in accounting systems and in putting typed material onto teletype tape. This is getting closer to use in composition. Certain problems such as hyphenation, editorial corrections and insertions remain. Human aid may be necessary on these. The method of operation of the scanner is described. 5 illustrations.

655.28

MY FIRST TEN YEARS WITH PHOTOCOMPOSITION. H. J. Echele and Mildred Weiler. Printing Production 91, No. 8, May 1961, pp. 40, 41, 94 (3 pages). Cost savings of 20 to 25%, also time savings result with photocomposition on certain jobs. Other observations: photocomposition and type will be 50-50 in years to come. Training and establishing a market are the problems of breaking into photocomposition. It took two years to reach break-even point. Advertising material catalogs, magazines and books are large part of work done. Methods are described briefly. 1 illustration.